## **Energy double play**

By RICHARD VALENTY Colorado Daily Staff Writer *Tuesday, March 27, 2007 8:38 PM MDT* 

The State of Colorado made some serious news Tuesday regarding the future of statewide renewable energy, even if scores of otherwise dignified Coloradans held multi-colored toy pinwheels during the ceremony.

Colorado Gov. Bill Ritter signed two bills into law Tuesday during a ceremony at the National Wind Technology Center (NWTC) just south of Boulder. In short, House Bill (HB) 1281 will increase renewable energy requirements for many utilities that supply electricity in the state, while Senate Bill (SB) 100 was designed to increase the construction of high-voltage transmission facilities.

Colorado became the first state in the nation to adopt a renewable energy standard at the ballot box in 2004 by passing the statutory Amendment 37, but HB 1281 amplified several of its requirements. Large investor-owned utilities such as Xcel Energy were required under 37 to hit 10 percent renewable electricity by 2015, and 1281 raised the bar to 20 percent by 2020.

Also, 1281 requires municipal utilities and rural electric providers to provide 10 percent of their electricity from renewable sources by 2020.

Ritter's 2006 gubernatorial campaign included a promise of working towards a "New Energy Economy" for the state, and Tuesday's ceremony was the latest in a series of energy-related announcements that have occurred since he took office.

"These new laws will improve our economic security, our environmental security and our national security," said Ritter Tuesday. "They will breathe economic life into rural Colorado. They will create new jobs, and they will say to the rest of the world, 'Colorado is open for business in what will be one of the most important industries of the 21st Century."

But Ritter didn't bring 1281 or 100 to life by himself, and a team of legislators, private sector representatives, renewable energy researchers/advocates and state staffers gathered at the NWTC to applaud the bills and speak about their importance to the state and various sectors.

State Reps. Jack Pommer, D-Boulder and Rob Witwer, R-Genessee, co-sponsored 1281 along with former CU regent and current state Sen. Gail Schwartz, D-Snowmass Village, but all three gave some credit for the state of the state's renewable energy goals to others especially to citizen advocates who pushed the idea of renewable standards before and during the A-37 campaign.

"The people of Colorado really led the way on this one," said Witwer.

Advocates said during the A-37 campaign that boosting the use of renewables would be better for the environment because burning coal to generate electricity can release pollutants such as mercury and greenhouse gases that can contribute to global warming.

But a fact sheet from Ritter's office suggested that 1281 would also lead to significant economic benefits for the state.

It said a recent study suggested 1281 would increase Colorado's share of the Gross Domestic Product (GDP) by \$1.9 billion through 2020; increase total wages paid to workers by \$570 billion; add 4,100 person-years of employment to the workforce; provide rural land owners with \$50 million in lease payment money and generate \$400 million in property tax revenues that will pay for services such as education.

Will Coyne, program director for the nonprofit organization Environment Colorado, said the numbers suggest that preserving the environment and enhancing the economy are not "mutually exclusive" goals.

"Today we have achieved victory for both," said Coyne Tuesday.

Ritter and a number of legislators also offered kudos to Xcel for its support. Paula Connelly, assistant general counsel for Xcel, said Xcel is the number-one wind energy utility in the U.S., and said it hopes to hit the A-37 and 1281 goals before deadline.

"We are proud to say that we will have met that target (10 percent by 2015) by the end of 2007," said Connelly to applause.

Ray Clifton, executive director of the Colorado Rural Electric Association (CREA), also said the state worked in a collaborative manner with rural co-ops that distribute electricity to more than 70 percent of Colorado's land area - and said 1281 is "a good piece of legislation."

Ritter said Colorado has very good natural resources when it comes to renewable energy ranking sixth in the nation for sunshine, 11th for wind and fourth in geothermal resources.

But the state also has a major problem - it lacks sufficient transmission infrastructure to bring generated electricity from certain rural areas to heavily populated areas that need the electricity.

Enter SB 100, sponsored by Senate President Joan Fitz-Gerald, D-Coal Creek Canyon, and Rep. Buffie McFadyen, D-Pueblo West. The bill, in short, would require certain utilities to identify high-potential wind energy locations and designate "Energy Resource Zones" where transmission shortages hinder the delivery of electricity, according to the Ritter fact sheet.

Transmission lines can cost \$1 million per mile, according to an Associated Press (AP) story, and SB 100 would allow the utilities to recover the cost of construction through rate adjustments.

The Ritter fact sheet compared the lack of transmission infrastructure to a "chicken and egg" situation where wind companies might not build turbines until there is enough transmission but utilities might not build transmission lines until there are enough turbines.

Dan Arvizu, director of the National Renewable Energy Laboratory (NREL), said both 1281 and 100 will help Colorado become a national renewable leader and help attract energy-related capital to the state.

"It takes this kind of legislation to tell investors that it's worth it to make the investment," said Arvizu. "Our mission is to get the technology to the marketplace, and we help policy makers and investors make good decisions about how wind fits into the New Energy Economy."

Renewable energy also powered the public address system for Tuesday's outdoor ceremony. The NWTC "produced" hydrogen on site to feed a hydrogen fuel cell generator, as NWTC wind turbines generated electricity for an electrolyzer that separated hydrogen from oxygen in water.

Contact Richard Valenty about this story at (303) 443-6272 ext. 126 or valenty@coloradodaily.com